**AMENDMENTS TO THE SPECIFICATION** 

IN THE SPECIFICATION:

Page 4

Please amend the Specification on page 4 beginning at line 23 as follows:

Fig. 1 is a system configuration of a wireless LAN system according to a first

embodiment of the present invention; Fig. 2 is a block diagram of an internal configuration of an

STA used in the system according to the first embodiment; Fig. 3 is a block diagram of an

internal configuration of a diversity device used in the system according to the first embodiment;

Fig. 4 depict Figs. 4A and 4B depict the configuration of a packet with a sequence number added

thereto; Fig. 5 depicts Figs. 5A and 5B depict the configuration of a packet with a sequence

number and received radio wave status information added thereto; Fig. 6 is a system

configuration of a wireless LAN system according to a sixth embodiment of the present

invention; Fig. 7 is a block diagram of an internal configuration of a layer 2 switch used in the

system according to the sixth embodiment; and Fig. 8 is a block diagram of an internal

configuration of an STA used in the system according to the sixth embodiment.

Page 5

Please delete line 13 on page 5 as follows:

First Embodiment

Please amend the Specification on page 5 beginning at line 24 as follows:

A wireless LAN terminal (hereinafter, "STA") 140 is wirelessly connected to the APs 130a to 130e. The STA 140 is a wireless transmitter receiver forming the wireless LAN together with the APs 130a to 130e, and under supervision of the STA 140, one or a plurality of user terminal devices 90 (hereinafter, "STA side terminal"), such as personal computers, are connected to the STA 140 via a cable, for example. The STA 140 and the user terminal devices 90 move in a unified manner. In this case, a wide area wireless LAN is assumed, in which the STA 140 is mounted to a mobile body such as trains or vehicles, and one or a plurality of user terminal devices 90 (hereinafter, "STA side terminal") is mounted to the mobile body.

# Page 6

Please delete line 19 on page 6 as follows:

(Uplink direction)

Please delete line 28 on page 6 as follows:

(Downlink direction)

#### Page 7

Please amend the Specification on page 7 beginning at line 21 as follows:

The diversity registration unit 220 searches for APs in the periphery via the wireless LAN IF 230, and sequentially selects a predetermined number of APs to be multiply connected (in this case, the two APs 130b and 130c). Every time when the association is established, The diversity registration unit 220 sends out to the diversity device 120, a diversity registration request that

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includes a plurality of IP addresses corresponding to IP tunnels to be used by the STA and the like, via each of the APs 130b and 130c. The respective diversity registration requests may also include an IP address of the terminal 90 STA side terminal 90 or a network prefix under the supervision of the STA. When the association with the predetermined number of (in this case, two) APs has been established, the diversity registration unit 220 registers the diversity registration request for a plurality of paths selected by the own device, that is, the diversity registration request transmitted to the diversity device 120, in the own device, and also starts the operation of a transfer system constituted by other components in the STA 140. The method of multiple connections to the APs in the wireless LAN between the STA 140 and the APs can be one sharing the same frequency according to CSMA/CA, or one using an individual frequency for each wireless link.

#### Page 11

Please amend the Specification on page 11 beginning at line 9 as follows:

Fig. 4(a) Fig. 4A depicts an IP packet with a sequence number SN, when a router such as a layer 3 home agent (HA) is adopted as the diversity device 120, and the sequence number SN is added immediately after the IP header. Fig. 4(b) Fig. 4B depicts an IP packet with a sequence number SN, when a layer 2 switch is adopted as the diversity device 120, and the sequence number SN is added immediately after the MAC header.

#### Page 12

Please amend the Specification on page 12 beginning at line 9 as follows:

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The selection processor 400 checks the sequence number of the decapsulated packets, and when a plurality of packets having the same sequence number is received, selects one of them, and sends the selected packet to the SN deleting unit 210 410. If only one packet is received due to an error or the like in the wireless section, the selection processor 400 selects and

The SN deleting unit 410 deletes the sequence number from the packet received from the selection processor 200 400, and sends the packet to the network IF 350.

# Page 14

outputs the packet.

Please delete line 14 on page 10 as follows:

(Downlink packet process)

### <u>Page 15</u>

Please delete line 15 on page 17 as follows:

(Downlink packet process)

# Page 17

Please delete line 17 on page 21 as follows:

**Second Embodiment** 

### Page 18

Please delete line 18 on page 9 as follows:

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**Third Embodiment** 

Please delete line 18 on page 32 as follows:

**Second Embodiment** 

Page 19

Please amend the Specification on page 19 beginning at line 25 as follows:

Fig. 5(a) Fig. 5A depicts an IP packet with a sequence number SN and the radio status

information, when a router such as a layer 3 home agent (HA) is adopted as the diversity device

120, and the sequence number SN and the radio status information are added immediately after

the IP header. Fig. 5(b) Fig. 5B depicts an IP packet with a sequence number SN and the radio

status information, when a layer 2 switch is adopted as the diversity device 120, and the

sequence number SN and the radio status information are added immediately after the MAC

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header.

Page 20

Please delete line 20 on page 6 as follows:

Fifth Embodiment

Please delete line 20 on page 27 as follows:

Sixth Embodiment

# Page 21

Please amend the Specification on page 21 beginning at line 15 as follows:

In this case, similar to the earlier case, the layer 2 switch 20 has a function of relaying packet transfer between the network terminal 110 and the STA side terminal 90, and the layer 2 switch 20 executes the network diversity operation in cooperation with the STA-140 STA 10. However, the IP tunnel used in the system in the first embodiment and the like is not used in this system, because the layer 2 switch is used here. Therefore, one IP address and one MAC address are allocated to the STA-140 STA 10. The method of multiple connections between the STA-140 STA 10 and the APs can be one sharing the same frequency according to CSMA/CA, or one using an individual frequency for each wireless link.